

be effected, at least in Animals near of Kin; (As Spaniels and Setting Dogs, Irish Grey-hounds and ordinary Grey-hounds, &c.)

16. Whether the Transfusion may be practis'd upon pregnant Bitches, at least at certain times of their gravitation? And what effect it will have upon the Whelps?

There were some other *Queries* proposed by the same *Author*; as, the weighing of the *Emittent* Animal before the Operation, that (making an abatement for the Effluvioms, and for the Excrements, if it voids any.) it may appear, how much blood it really loses. To which were annexed divers others not so fit to be perused but by *Physitians*, and therefore here omitted.

A Method

For Observing the Eclipses of the Moon, free from the Common Inconveniencies, as it was left by the Learned Mr. Rook, late Gresham-Professor of Geometry.

Eclipses of the Moon are observed for two principal ends; One *Astronomical*, that by comparing Observations with Calculations, the *Theory* of the *Moons Motion* may be perfected, and the *Tables* thereof reformed: the other, *Geographical*, that by comparing among themselves the Observations of the same *Ecliptick Phases*, made in *divers* places, the *Difference* of *Meridians* or *Longitudes* of those places may be discerned

The Knowledge of the Eclipse's Quantity and Duration, the Shadows, Curvity, and Inclination, &c. conduce only to the former of these ends. The exact time of the Beginning, Middle, and End of Eclipses, as also in *Total* ones, the Beginning and End of *Total* darkness, is useful for both of them.

But because in Observations made by the *bare Eye*, these times considerably differ from those with a *Telescope*; and because the *Beginning* of Eclipses, and the *End* of *Total* darkness, are scarce to be observed exactly, even with Glasses (none being able clearly to distinguish between the *True Shadow* and *Penumbra*, unless he hath seen, for some time before, the Line, separating them, pass along upon the Surface of the Moon;) and lastly, because in small

Partial

Partial Eclipses, the Beginning and End, and in *Total* ones of short continuance in the Shadow, the Beginning and End of *Total* darkness, are unfit for nice Observations, by reason of the slow change of *Apparences*, which the *Oblique* Motion of the Shadow then causeth. For these reasons I shall propound a *Method* peculiarly design'd for the Accomplishment of the *Geographical* end in Observing Lunar Eclipses, free (as far as is possible) from all the mentioned Inconveniences.

For, *First*, It shall not be practicable without a Telescope. *Secondly*, The Observer shall alwayes have opportunity before his principal Observation, to note the Distinction between the *True Shadow* and the *Penumbra*. And, *Thirdly*, It shall be applicable to those Seasons of the Eclipse, when there is the suddenest Alteration in the *Apparences*.

To satisfie all which intents,

Let there be of the Eminentest *Spots*, dispersed over all Quarters of the Moons Surface, a select number generally agreed on, to be constantly made use of, to this purpose, in all parts of the World. As, for Example, those, which *M. Hevelius* calleth,

Mons	{	Sinai.	Insula	{	Besbicus.	Palus	{	Mæotis.
		Æthna.						
		Porphyrites.			Creta.			Maraotis.
		Serorum.			Lacus Niger Major.			

Let in each *Eclipse*, not all, but (for instance) three of these *Spots*, which then lie nearest to the *Ecliptick*, be exactly observed, when they are first touch'd by the *True Shadow*, and again, when they are just compleatly entred into it, and (if you please) also in the *Decrease* of the Eclipse, when they are first fully clear from the *True Shadow*: For the accurate determinations of which moments of time (that being in this business of main importance) let there be taken *Altitudes* of remarkable *Fixed Stars*; on this
side

side of the *Line*, of such, as lie between the *Aequator* and *Tropick* of *Cancer*; but *beyond* the *Line*, of such, as are situate towards the other *Tropick*; and in all places, of such, as at the time of Observation, are about 4. hours distant from the *Meridian*.

*An Account
Of some Observations, lately made in Spain, by
His Excellency the Earl of Sandwich.*

THE Right Honourable the *Earl of Sandwich*, as he appears eminent in discharging the Trust, his Majesty hath reposed in him, of Ambassador Extraordinary to the King of *Spain*; so he forgets not in the midst of that Employment, that he is a Member of the *Royal Society*; but does from time to time, when his weighty State-Negotiations do permit, imploy himself in making considerable Observations of divers kinds, both *Astronomical* and *Physiological*; and communicateth the same to the said *Society*; as for instance, lately, what he has observ'd concerning the *Solar Eclipse* in *June* last, the *Suns* height in the *Solstice*, and also the Latitude of *Madrid*, esteeming by the *Suns* Altitude in the *Solstice*, and by other Meridian Altitudes, the Latitude of *Madrid* to be 40 deg. 10 min, which differs considerably from that assigned by others; the General Chart of *Europe* giving to it 41 deg. 30 min. the General Map of *Spain*, 40 deg. 27 min. A large Provincial Map of *Castile*, 40 deg. 38 min.

To these particulars, and others formerly imparted, his Excellency is making more of the same nature; and particularly those of the Immersion of the *Satellites* of *Jupiter*.

We must not omit mentioning here, what he hath observed of *Halo's* about the *Moon*; which he relates in these words;

Decemb. 25. Old Style, 1666. In the Evening, here (vid. at *Madrid*) was a great *Halo* about the *Moon*, the *Semidiameter* whereof was about 23 deg. 30 min. *Aldebaran* was just in the North-east part of the *Circle*, and the two Horns of *Aries* just enclosed by the South-west of the *Circle*, the *Moon* being in the Center. I note this the rather (saith he) because five or six years ago, vid. *Novemb. 21. Old Style, 1661.* an hour after Sun-set, I saw a great *Halo* about the *Moon* of the same *Semidiameter*,